UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,290	03/25/2008 Si Young Cho		Q97193	6567
23373 7590 03/15/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W.			EXAMINER	
			SCHMIDTMANN, BAHAR	
SUITE 800 WASHINGTON, DC 20037			ART UNIT	PAPER NUMBER
			1623	
			NOTIFICATION DATE	DELIVERY MODE
			03/15/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com PPROCESSING@SUGHRUE.COM USPTO@SUGHRUE.COM

	Application No.	Applicant(s)				
Office Action Occurrence	10/599,290	CHO ET AL.				
Office Action Summary	Examiner	Art Unit				
	BAHAR SCHMIDTMANN	1623				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 22 De	ecember 2009.					
· <u> </u>						
3) Since this application is in condition for allowan	secution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-10</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-10</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers	·					
·· _						
9) The specification is objected to by the Examiner.						
	10)⊠ The drawing(s) filed on <u>25 September 2009</u> is/are: a)⊠ accepted or b) objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/27/2009.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte				

This Office Action is in response to Applicant's Amendment and Remarks filed on 22 December 2009 in which claims 6-7 were amended to change the scope and breadth of the claims.

Claims 1-10 are pending in the current application and are examined on the merits herein.

The Declaration of Ms. Si-Young Cho, submitted by Applicant on 22 December 2009 under 37 CFR §1.132 is acknowledged and will be further discussed below.

Priority

The submission of a certified copy of foreign priority document KR 10-2004-0020800 on 24 December 2009 is acknowledged.

Information Disclosure Statement

The Information Disclosure Statement submitted 27 October 2009 is acknowledged and considered.

Objections Withdrawn

Applicant's amendment, filed 22 December 2009, with respect to the objection of claims 6-7 as being objected to for improper multiple dependency has been fully considered and is persuasive because the claims as amended properly depend from an independent claim.

The objection is hereby withdrawn.

Modified Rejections

The following are new ground(s) or modified rejections <u>necessitated</u> by Applicant's amendment, filed on 22 December 2009, where the improper multiple dependency of claims 6 and 7 have been amended to depend from claim 1. Therefore, rejections from the previous Office Action, dated 21 July 2009, have been modified and are listed below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (*J. of Invest. Dermat.*, cited in previous Office Action) and Ahn et al. (KR 10-2003-0075492, abstract cited in previous Office Action) in view of Park et al. (KR1020030064986, cited by Applicant in recently submitted Information Disclosure Statement, machine translation cited in PTO-892).

Lee et al. teaches the skin protective properties of ginsenoside F1, wherein ginsenoside F1 is suggested to protect cells against UVB induced apoptosis by maintaining constant levels of Brn-3a and inhibiting Bcl-2 down regulation (p.607, second column, second paragraph). Lee et al. teaches UVB causes said Bcl-2 down regulation via down regulation of said Brn-3a transcription factor in human HaCaT keratinocytes (p.607, second column, second paragraph). From these findings, Lee et al. teaches ginsenoside F1 as a useful compound in preventing UVB-induced skin damage (p.612, second column, final paragraph). Lee et al. teaches effective concentrations of ginsenoside ranging at 10 μ M, 50 μ M and even as high as 5 mM (p.630, results, first and second paragraph).

Lee et al. does not expressly disclose a skin-care composition comprising (-) epigallocatechin-3-gallate, hereafter EGCG (instant claims 1-10). Lee et al. does not expressly disclose the combined amount of EGCG and ginsenoside F1 (instant claims 6-7).

Ahn et al. teaches a cosmetic composition comprising EGCG that inhibits aging of the skin. Ahn et al. suggests EGCG inhibits oxidation of the skin from oxygen and

inhibits peroxide formation (abstract). Ahn et al. teaches a cosmetic composition comprising 0.001 to 20 wt % EGCG (abstract).

Park et al. teaches a cosmetic composition comprising physiologically active compounds (p.2, *Purpose of the invention*, first paragraph). Park et al. teaches the physiologically active compounds include EGCG and ginsenosides (p.4, third paragraph).

It would have been obvious at the time the invention was made to formulate a skin-care composition comprising ginsenoside F1 and EGCG.

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." See MPEP 2144.06. One having ordinary skill would have been motivated to employ ginsenoside F1 and EGCG in a skin-care composition because these active compounds have been shown to protect the skin from external environmental agents. Both Lee et al. and Ahn et al. teach a cosmetic composition for protecting the skin from external environmental agents, such as UV radiation or oxygen oxidation. And Park et al. teaches both EGCG and ginsenosides in general can be formulated as active ingredients in a cosmetic composition. Therefore, it would have been obvious to a person of ordinary skill in the art to combine ginsenoside F1 and EGCG in a cosmetic skin composition for protecting the skin since they have both been taught as skin care compositions.

One having ordinary skill in the art would also known that since ginsenoside F1 and EGCG are used for the same purpose, they could both be used in a composition so that their combined amount as active ingredients result in a similar total weight ratio similar as that taught by Ahn et al. The total weight ratio taught by Ahn et al. overlaps with that of instant claim 6. "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990)." See MPEP 2144.05, section I.

And because ginsenosides and EGCG are taught to be active ingredients in cosmetic compositions as taught by Park et al., one having ordinary skill would be motivated to use the two components in similar weight ratios (instant claim 7). Additionally, one having ordinary skill would know that concentration is routinely optimized. "Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)." See MPEP 2144.05, section II.

Furthermore, one would have been motivated to combine both components because not only have they been proven useful on the skin, but the skin is normally exposed to both UV radiation and oxygen simultaneously. Thus, one having ordinary

Page 7

skill would predict that a composition comprising both ginsenoside F1 and EGCG would successfully result in protecting the skin as a skin-care formulation.

It should be noted that the recitation of "wherein said skin-care is obtained by the apoptosis-inhibitory effect of said active ingredients" in claim 2, and its dependent claims 3-5 are product-by-process claims and do not serve to further limit independent claim 2. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See MPEP 2113.

It should be noted that the recitation of the preambles "an inhibitor of Rb protein dephosphorylation" in claim 8, the recitation of "an inhibitor of skin damage for preventing cellular damage caused by exposure to ultraviolet rays" in claim 9, and "an external composition for skin care" in claim 10 do not add patentable weight.

Thus, the claimed invention as a whole is *prima facie* obvious over the combined teachings of the prior art.

Response to Arguments

Applicant's arguments filed 22 December 2009 and the Declaration of Ms. Si-Young Cho, submitted by Applicant on 22 December 2009 under 37 CFR §1.132 have been fully considered but they are not persuasive. Applicant's experimental results regarding synergistic effects of ginsenoside F1 and EGCG have been fully considered but they are not persuasive.

Applicant has argued and shown in the Declaration that 2 μ M ginsenoside F1 + 10 μ M EGCG showed about 2-fold inhibitory effects on UV-caused apoptotic cell death compared to untreated control groups, wherein 2 μ M ginsenoside F1 alone and 10 μ M EGCG alone did not show any anti-apoptotic effects compared to the untreated control group.

First, there is no actual data showing that 2 μ M ginsenoside F1 alone and 10 μ M EGCG alone did not show any anti-apoptotic effects compared to the untreated control group, besides just a conclusive statement in the remarks and declaration.

Secondly, in response to applicant's argument and declaration that the combination of references is non-obvious because of synergic effects and thus fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., combination of 2 µM ginsenoside F1 + 10 µM EGCG) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Thirdly, with respect to instant claims, there has been no clear comparison between the full scope and breadth of the claimed weight ranges and each ingredient alone, i.e. ginsenoside F1 and EGCG. A demonstration of synergistic effects is highly dependent on the ratio of the combined ingredients <u>as well as</u> the dosage/concentration of said ingredients. The instant claims are not limited to dosage/concentration. It is

also noted that there is very little experimental data of multiple dosages/concentrations provided as support for the broadly claimed weight ratios.

Thus, the evidence in the specification and declaration is also not commensurate in scope with the claimed invention and does not demonstrate criticality of any range of the ingredients in the claimed composition. See MPEP § 716.02(d). Therefore, the evidence presented in specification and declaration herein is not seen to be clear and convincing in support the nonobviousness of the instant claimed invention over the prior art.

Currently, the combined teachings of Lee et al., Ahn et al., and Park et al. still obviate instant claims 1-10.

The rejection is hereby **maintained**.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7-10 of copending Application No. 12/135,663 in view of Ahn et al. (KR 10-2003-0075492, abstract, cited in previous Office Action).

Although the conflicting claims are not identical, they are not patentably distinct from each other. The claims of the '663 application are drawn to a method of administering a composition comprising ginsenoside F1 to prevent skin-aging or skin cancer. The claims of the '663 application do not expressly disclose EGCG as part of the composition.

Ahn et al. teaches as discussed above.

A method of administering a composition comprising ginsenoside F1 necessitates the composition comprising ginsenoside F1. It is noted that the claims of the instant application also include (-)epigallocatechin-3-gallate. However, the transitional phrase of the copending application, "containing", does not exclude additional compounds.

One having ordinary skill in the art would also known that since ginsenoside F1 and EGCG are used for the same purpose, they could both be used in a composition so that their combined amounts result in a similar total weight ratio similar as that taught by Ahn et al. The total weight ratio taught by Ahn et al. overlaps with that of instant claim

6. "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990)." See MPEP 2144.05, section I.

And because ginsenoside F1 and EGCG are taught to be active ingredients in cosmetic compositions as taught by Ahn et al. and the '663 application, one having ordinary skill would be motivated to use the two components in similar weight ratios (instant claim 7). Additionally, one having ordinary skill would know that concentration is routinely optimized. "Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)." See MPEP 2144.05, section II.

Thus, the instant claims 1-10 are seen to be obviated by claims 7-10 of copending application no. 12/135,663.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6-7 of copending Application No. 10/586973 in view of Ahn et al. (KR 10-2003-0075492, abstract, cited in previous Office Action).

Although the conflicting claims are not identical, they are not patentably distinct from each other. Claims 6-7 of the '973 application are drawn to a method for inhibiting biosynthesis of gelatinase comprising applying a composition comprising ginsenoside F1 and compound K. The claims of the '973 application do not expressly disclose EGCG as part of the composition.

Ahn et al. teaches as discussed above.

The claims of the instant application are drawn to a composition comprising ginsenoside F1 for application to the skin.

A method of administering a composition comprising ginsenoside F1 necessitates the composition comprising ginsenoside F1. It is noted the claims of the copending application also includes compound K. However, the transitional phrase of the instant claim, "containing", does not exclude additional compounds. The transitional phrase of copending application, "containing", also does not exclude additional compounds.

One having ordinary skill in the art would also known that since ginsenoside F1 and EGCG are used for the same purpose, they could both be used in a composition so that their combined amounts result in a similar total weight ratio similar as that taught by Ahn et al. The total weight ratio taught by Ahn et al. overlaps with that of instant claim 6. "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990)." See MPEP 2144.05, section I.

And because ginsenoside F1 and EGCG are taught to be active ingredients in cosmetic compositions as taught by Ahn et al. and the '663 application, one having ordinary skill would be motivated to use the two components in similar weight ratios (instant claim 7). Additionally, one having ordinary skill would know that concentration is routinely optimized. "Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)." See MPEP 2144.05, section II.

Thus, the instant claims 1-10 are seen to be obviated by claims 6-7 of copending application no. 10/586973.

This is a provisional obviousness-type double patenting rejection.

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 12/064887 in view of Lee et al. (*J. of Invest. Dermat.*, cited in previous Office Action).

Although the conflicting claims are not identical, they are not patentably distinct from each other. Claims 1-13 of the '887 application are drawn to an anti-aging composition comprising at least one of catechins and flavonols as an active ingredient.

Claim 2 of the '887 application lists (-)epigallocatechin gallate as one of the possible catechins used in the composition.

The '887 application does not expressly disclose the composition further comprising ginsenoside F1.

Lee et al. teaches as discussed above.

The claims of the instant application are drawn to a composition comprising ginsenoside F1 and (-)epigallocatechin gallate for application to the skin.

An anti-aging composition and method comprising (-)epigallocatechin gallate necessitates the composition of instant application. It is noted the claims of the copending application also includes flavonols. However, the transitional phrase of the instant claim, "containing", does not exclude additional compounds. The transitional phrase of copending application, "containing", also does not exclude additional compounds.

One having ordinary skill in the art would also known that since ginsenoside F1 and EGCG are used for the same purpose, they could both be used in a composition so that their combined amounts result in a similar total weight ratio similar as that taught by Ahn et al. The total weight ratio taught by the '887 application overlaps with that of instant claim 6. "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990)." See MPEP 2144.05, section I.

And because ginsenoside F1 and EGCG are taught to be active ingredients in cosmetic compositions as taught by Lee et al. and the '887 application, one having ordinary skill would be motivated to use the two components in similar weight ratios (instant claim 7). Additionally, one having ordinary skill would know that concentration is routinely optimized. "Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)." See MPEP 2144.05, section II.

Thus, the instant claims 1-10 are seen to be obviated by claim 1-13 of copending application no. 12/06488711.

This is a provisional obviousness-type double patenting rejection.

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 15-21 of copending Application No. 11/443271 in view of Ahn et al. (KR 10-2003-0075492, abstract, cited in previous Office Action).

Although the conflicting claims are not identical, they are not patentably distinct from each other. Claims 15-21 of the '271 application are drawn to a method of combating aging comprising topically applying a nanoemulsion that comprises a

ginseng glucoside. Claim 16 of the '271 lists 20-O-β-D-glucopyranosyl-20(S)-protopanaxatriol (i.e. same as ginsenoside F1) as a ginseng glucoside.

The '271 application does not expressly disclose EGCG.

Ahn et al. teaches as discussed above.

The claims of the instant application are drawn to a composition comprising ginsenoside F1 and (-)epigallocatechin gallate for application to the skin.

A method of combating aging comprising topically applying a nanoemulsion that comprises a ginseng glucoside, necessitates the composition of instant application containing ginsenoside F1. It is noted that the claims of the instant application also include (-)epigallocatechin-3-gallate. However, the transitional phrase of the copending application, "containing", does not exclude additional compounds.

One having ordinary skill in the art would also known that since ginsenoside F1 and EGCG are used for the same purpose, they could both be used in a composition so that their combined amounts result in a similar total weight ratio similar as that taught by Ahn et al. The total weight ratio taught by the '271 application overlaps with that of instant claim 6. "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990)." See MPEP 2144.05, section I.

And because ginsenoside F1 and EGCG are taught to be active ingredients in cosmetic compositions as taught by Ahn et al. and the '271 application, one having ordinary skill would be motivated to use the two components in similar weight ratios

(instant claim 7). Additionally, one having ordinary skill would know that concentration is routinely optimized. "Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)." See MPEP 2144.05, section II.

Thus, the instant claims 1-10 are seen to be obviated by claims 15-21 of copending application no. 12/06488711.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

Applicant's arguments filed 22 December 2009 have been fully considered but they are not persuasive.

Applicant has requested that the provisional rejections be held in abeyance until patentable subject matter is identified. However, this request cannot be considered, especially in view that no patentable subject matter has yet been identified.

The obviousness double patenting rejections are hereby **maintained**.

Conclusion

In view of the rejections to the pending claims set forth above, no claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. BAHAR SCHMIDTMANN whose telephone number is 571-270-1326. The examiner can normally be reached on Mon-Thurs 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/599,290 Page 19

Art Unit: 1623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BAHAR SCHMIDTMANN/ Patent Examiner Art Unit 1623 /Shaojia Anna Jiang/ Supervisory Patent Examiner Art Unit 1623